CHAPTER 2

QUALIFICATION TRAINING

This chapter prescribes minimum qualification training requirements. Units are authorized to conduct initial aviator qualification training in the aircraft. This chapter also describes this training and the prerequisites and qualification requirements for unit trainers and evaluators. Qualification training for aeroscout observers and aerial fire support observers is conducted only at the USAAVNC or at a USAAVNC-approved school. Units are not authorized to conduct this training.

2-1. ACADEMIC TRAINING

a. During academic training, the aviator receives sufficient instruction to be knowledgeable of the subjects listed in Figure 2-1. When possible, academic training should be completed before corresponding flight training. The subjects may be presented in any order. However, the introduction should be first, and the aircraft operator's manual written examination should be last. Systems instruction includes training in operation, capabilities, limitations, and malfunction analysis.

Introduction
Structure
Fuel and oil systems
Power plant and related systems
Transmission and drive systems
Rotor systems
Electrical systems
Flight control and hydraulic systems
Mission equipment*
Weight and balance
Avionics equipment*
Emergency procedures*
Aircraft limitations and performance planning charts*
Aircraft operator's manual written examination

*These subjects may be covered outside the classroom by the IP.

Figure 2-1. Academic subjects for initial aircraft qualification

b. When an applicable USAAVNC course exists, POIs and lesson plans from the USAAVNC must be used to conduct training. Although the hour requirements in the POIs do not apply, the training objectives do. Training materials can be obtained by writing Commander, US Army Aviation Center, ATTN: ATZQ-DAP-TSD, Fort Rucker, AL 36362-5035, or calling DSN 558-3283/5990 or commercial (205) 255-3283/5990. When an applicable USAAVNC course does not exist, ARNG units must use POIs and lesson plans approved by the Chief, National Guard Bureau.

2-2. FLIGHT TRAINING

a. During flight training, the aviator is trained to proficiency in the base tasks identified in Chapter 5. Minimum flight time will not be less than ten hours. A minimum of one hour of night and one hour of hooded flight instruction will be conducted in the aircraft. More efficient training and learning retention will result if flight training is completed without interruption.

b. Realism is important in qualification flight training. To achieve it, commanders must ensure that training includes operation of the aircraft at or near maximum gross weight.

c. Training in night operations must include locating and operating all aircraft lighting equipment. It should also include takeoffs and landings with minimum runway or field lighting appropriate for the mission and ambient light conditions.

2-3. SERIES QUALIFICATION TRAINING

a. Qualification training between the OH-58A and OH-58C or between the various OH-6-series helicopters will consist of sufficient academic instruction and a minimum of three hours of flight instruction by an IP/SP of which one hour must be at night.

b. Qualification training in the OH-58A+ is necessary if--

(1) An aviator is OH-58C qualified only (see 2-3a above).

(2) An aviator is OH-58A qualified or OH-58A and OH-58C qualified. The aviator will receive sufficient academic instruction on the differences between the OH-58A and the OH-58A+.

NOTE 1: If an aviator is OH-58A+ qualified only and desires qualification in the OH-58A, see 2-3b2 above. If the aviator desires qualification in the OH-58C, see 2-3a above.

NOTE 2: The term OH-58A+ is used synonymously with OH-58A (720).

2-4. INSTRUMENT TRAINING

a. An aviator who is not instrument qualified must satisfactorily complete instrument qualification training conducted at the USAAVNC.

b. Instrument training for the Reserve Component is accomplished in the UH-1 aircraft. Before this training is started, OH-58/OH-6 and UH-1 contact evaluations must be completed. UH-1 contact training is conducted per TC 1-211.

2-5. NVG TRAINING

a. Initial NVG qualification training will be conducted according to TC 1-210 and this ATM and will consist of a minimum of ten hours of flight time. Before undergoing NVG qualification training, an aviator must be qualified and current in the aircraft. He also must complete the training within 45 consecutive days. (The 45-day period is a sliding window within the 90-day progression period.) Figure 2-2 shows the required academic NVG training requirements.

Subjects
Vision, depth perception, and night vision orientation
Introduction to NVG
Aircraft modification requirements for NVG flight
Night terrain interpretation
NVG navigation, to include map preparation
Night tactical operations, to include lighting
NVG ground and air safety

Figure 2-2. Academic subjects for NVG training

b. Before the first NVG training flight, the aviator must undergo a one-hour training period at night in a static aircraft with an NVG IP/SP. Minimum tasks that the aviator must perform are aircraft emergency procedures, NVG emergency procedures, and crew coordination. This one-hour period and, if applicable, the NVG flight evaluation may be applied toward the ten-hour flight minimum required for NVG qualification. Figure 2-3 (page 2-4) shows those tasks that the aviator must perform during NVG qualification training. During this training, the aviator must occupy a crew position with access to the flight controls. After the aviator completes the training, his proficiency will be

determined by a flight evaluation or by continual evaluation by an NVG IP/SP.

Number	Title
1000	Conduct crew mission briefing
1007	Perform engine-start, run-up, hover, and before-takeoff/landing checks and after-landing tasks
1016	Perform hover power check
1017	Perform hovering flight
1018	Perform a normal takeoff
1023	Perform fuel management procedures
1024	Perform emergency procedures for an actual or a simulated NVG failure
1025	Navigate by pilotage and dead reckoning
1028	Perform VMC approach
1032	Perform slope operations
1033	Perform terrain flight mission planning
1034	Perform terrain flight takeoff
1035	Perform terrain flight
1036	Perform hover OGE check
1037	Perform NOE deceleration
1038	Perform terrain flight approach
1067	Perform aerial observation
1068	Perform or describe emergency procedures
1083	Perform or describe inadvertent IMC procedures/VHIRP
1090	Perform masking and unmasking
1097	Negotiate wire obstacles

Figure 2-3. Aircraft NVG qualification training tasks

c. An aviator who is NVG-qualified in an aircraft other than the OH-58/OH-6 must undergo additional NVG qualification in the training aircraft. He must complete the requirements in TC 1-210 and the training shown in Figure 2-4.

NOTE: A crew member qualified in the AN/PVS-5 or AN/AVS-6 must receive sufficient academic instruction on system operation to qualify in the other model.

Subjects	Hours
Academic training[1]	
Static aircraft training period[2]	1.0
Demonstration and practice of NVG tasks (Figure 2-3) and any special/additional tasks designated by the commander	5.0
Flight evaluation[3]	2.0
Total Hours[4]	8.0

[1]Academic training will include the subject areas shown in Figure 2-2.
[2]Training will be conducted at night by an NVG IP/SP.
[3]This may be a continual evaluation.
[4]This time may be reduced to no less than 4.5 hours based on the IP's or SP's recommendation concerning the aviator's proficiency. It may include the NVG flight evaluation but not the static aircraft training period.

Figure 2-4. Aircraft NVG qualification training requirements

2-6. AIRCRAFT ATAS QUALIFICATION

The commander should select aviators/AOs for ATAS qualification based on the unit's needs and each individual's demonstrated ability. Aviators/AOs who are designated to operate the ATAS and who were not previously ATAS-qualified must undergo ATAS qualification training before operating the system. Training materials can be obtained by writing Commander, US Army Aviation Center, ATTN: ATZQ-TDO-TSD, Fort Rucker, AL 36362-5035, or calling DSN 558-3283/5990 or commercial (205) 255-3283/5990. Aircraft ATAS qualification tasks are listed in Figure 2-5 (page 2-6), and an ATAS qualification training guide is shown in Figure 2-6 (page 2-6). The requirements for aircraft ATAS qualification are listed below.

a. The aviator will occupy the right seat and the AO/AFSO will occupy the left seat.

b. The aviator/AO will complete the training shown in Figures 2-7 and 2-8 (page 2-7).

c. The aviator and AO will satisfactorily complete an evaluation by an ATAS IP/SP during the day and at night. They may satisfy the night requirement by wearing the NVG or by flying night unaided. Mandatory evaluation tasks are identified in Chapter 5. The evaluation may be a continual evaluation.

NOTE: An IP/SP will train and evaluate the aviator/AO before the aviator/AO operates the ATAS under the NVG.

Number	Title
2023	Perform installation and loading of weapons
2024	Perform preflight inspection of weapon systems
2031	Engage target with the ATAS
2034	Safe and clear weapon systems

Figure 2-5. Aircraft ATAS qualification tasks

Subjects	Hours
Academic training	3.0
Aircraft training period[1]	1.5
Demonstration and practice of ATAS qualification tasks[2]	2.0
Flight evaluation[3]	1.0
Total	7.5

[1]This subject consists of switchology and systems usage conducted in a static aircraft during systems preflight and operation.

[2]This time will consist of one hour day and one hour night/NVG, as a minimum.

[3]This may be a continual evaluation.

Figure 2-6. ATAS qualification training guide

Subjects
Systems description
Theory of IR energy
Missile description
Systems operation

Figure 2-7. ATAS academic training requirements

Subjects	Hours
Preflight[1]	.5
System run-up/test[1]	.5
Flight tasks[2]	2.0
ARM/DEARM[1]	.5
Total	3.5

[1]This time does not reflect actual flight time.
[2]A minimum of one hour of day and one hour of night or NVG is required for qualification.

Figure 2-8. ATAS flight training requirements

2-7. PILOT-IN-COMMAND, UNIT TRAINER, AND EVALUATOR PREREQUISITES AND REQUIREMENTS

Personnel in these categories must meet the requirements stated in AR 95-1.

NOTE: For IP/IE equivalency evaluations given by HQDA, the commander will forward a written request for approval of the desired evaluation to HQDA (DAMO-TRS). Per AR 95-1, the request must be sent through the Commander, US Army Aviation Center, ATTN: ATZQ-ESF, Fort Rucker, AL 36362-5214. The aviator's training record must show completion of minimum requirements. It also must include DA Forms 4507-R, 5865-R, and 4507-2-R, if used. (See Chapter 9.) The instructor will sign DA Forms 4507-R,

5865-R, and 4507-2-R (if used) to indicate satisfactory completion of the required training. Initial IP/IE evaluations will be conducted according to paragraph 8-3. Written examinations will be administered as needed. Failure to meet any prerequisite or failure of any portion of an examination will terminate the evaluation. Equivalency reevaluations will not be conducted. An individual who fails any portion of the evaluation must attend the resident course to obtain an initial IP/IE designation.

2-8. MAINTENANCE TEST PILOT PREREQUISITES AND REQUIREMENTS

a. MPs must meet the requirements stated in AR 95-1 and TC 1-210.

b. If an MP needs to perform maintenance test flights on an aircraft in which he has not received formal resident training, he may be trained in the field by an ME in the OH-58A/C or OH-6. Field training procedures are as follows:

(1) Prerequisites.

(a) The aviator must be qualified and current in the aircraft for which training is sought.

(b) The aviator seeking training must be qualified as an MP through initial qualification or in a challenge program in the AH-1, UH-1, or OH-58.

(2) Qualification requirements.

(a) The aviator must receive MTF training from an ME in the appropriate aircraft. Figure 2-9 shows the recommended flight training outline.

(b) Academic training will be conducted and documented showing that the prospective MP has sufficient knowledge in all aircraft systems, including components and their control movements.

(c) Before the final evaluation is conducted, the unit will coordinate with the Directorate of Evaluation and Standardization (DOES), Fort Eustis, VA for approval. Only DOES or a DOES-designated ME will administer the final evaluation. Once the final evaluation is completed, the aviator will receive an initial MP qualification memorandum from DOES. The unit may use the final evaluation grade slip recommendation for MP status as authorization for orders until the memorandum is received from DOES.

(3) **Grade slips.** A copy of the evaluation grade slip for the final evaluation/initial designation of a field-trained MP in a subsequent aircraft will be sent to Assistant Commandant, USAALS, ATTN: ATSQ-LES-M, Fort Eustis, VA 23604-5431.

Task	Hours
Flight planning[1]	1.0
Flight readiness inspection[1]	5.0
Before-starting engine checks[1]	2.0
Systems and engine run-up checks[1]	2.0
Baseline and normal HIT checks[1]	.5
Test flight hover maneuvers[2]	2.0
In-flight test flight maneuvers[2]	3.0
After-landing and engine shutdown checks[1]	2.0
Postflight checks[1]	1.0
Forms and records completion[1]	2.0
Total	5.0

[1]These tasks are not considered as flight time.
[2]These hours may be decreased based on demonstrated proficiency to an ME.

Figure 2-9. Flight training guide for subsequent MP qualification

2-9. MAINTENANCE TEST FLIGHT EVALUATOR

a. Prerequisites. The aviator must meet the requirements stated in AR 95-1 and TC 1-210.

b. Qualification Requirements. The MP seeking ME designation will be qualified according to AR 95-1 and TC 1-210. He also must be designated, in writing, by the commander.

(1) Grade slips. A copy of the initial evaluation grade slip for **ME** duties will be forwarded to Assistant Commandant, US Army Aviation Logistics School, ATTN: ATSQ-LES-M, Fort Eustis, VA 23604-5431.

(2) DOES-designated MEs. The Director of Evaluation and Standardization, US Army Aviation Logistics School, will identify MEs in the field who show exceptional abilities in maintenance

test flight standardization. These individuals will be selected during DA flight standardization visits and will receive a designation from the DOES.

2-10. AEROSCOUT OBSERVER/AERIAL FIRE SUPPORT OBSERVER

An AO/AFSO is initially qualified in the OH-58A/C or OH-6 when he has completed all phases-of training and has graduated from the appropriate qualification course. This course is conducted only at the USAAVNC or at a USAAVNC-approved school. Before performing AO/AFSO duties in the other aircraft, he must demonstrate to an IP/SP proficiency in the tasks listed in Figure 2-10. If the AO/AFSO is required to maintain NVG currency or is in an NVG-designated position, he will demonstrate proficiency to an NVG IP/SP at night under NVG, as indicated.

Number	Title	NVG
1005	Perform preflight inspection	
1007	Perform engine-start, run-up, hover, and before-takeoff/landing checks and after-landing tasks	X
1011	Perform straight-and-level flight	
1012	Perform turns, climbs, and descents	
1017	Perform hovering flight	
1018	Perform a normal takeoff	
1023	Perform fuel management procedures	X
1024	Perform emergency procedures for an actual or simulated NVG failure	X
1028	Perform VMC approach	
1035	Perform terrain flight	X
1076	Perform radio navigation	
1078	Perform unusual attitude recovery	
1079	Perform radio communication procedures	
1095	Operate aircraft survivability equipment	
1099	Operate Mark XII IFF system	

Figure 2-10. Additional aircraft qualification task list